DOCUMENT RESUME

ED 283 014 CE 047 451

TITLE	Yeast Breads. Learning Activity Pack and Instructor's Guide 5.15a. Commercial Foods and Culinary Arts Competency-Based Series. Section 5: Basic Food Preparation.
INSTITUTION	Florida State Univ., Tallahassee. Center for Studies in Vocational Education.
SPONS AGENCY	Florida State Dept. of Education, Tallahassee. Div. of Vocational, Adult, and Community Education.
REPORT NO	IE-350-BK-86; IE-351-BK-86
PUB DATE	Jan 86
NOTE	49p.; For other documents in this series, see CE 047 434-456.
PUB TYPE	Guides - Classroom Use - Materials (For Learner) (051) -- Guides - Classroom Use - Guides (For Teachers) (052) -- Tests/Evaluation Instruments (160)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Behavioral Objectives; Competency Based Education; *Cooking Instruction; Food; *Food Service; *Foods Instruction; Learning Activities; *Occupational Home Economics; Secondary Education
IDENTIFIERS	*Breads; Florida; *Food Preparation

ABSTRACT

This document consists of a learning activity packet (LAP) for the student and an instructor's guide for the teacher. The LAP is intended to acquaint occupational home economics students with yeast breads and their ingredients. Illustrated information sheets and learning activities are provided in these areas: yeast breads and their ingredients, and preparing yeast bread. The instructor's guide begins with an instructional matrix in which the information sheets and written activities contained in the LAP and the written test items included in the instructor's guide are cross-referenced to the knowledge objectives addressed by the materials. This is followed by a series of notes to instructors on the LAP series and suggested instructional procedures for use in conducting individual and group enrichment activities. A unit test and answer key are included. (MN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

LEARNING ACTIVITY PACK

5.15a

SECTION 5

Yeast Breads

Basic Food Preparation

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Dr. Ouat
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ED283014

CE 047 451

Sponsored and published by:
Florida Department of Education
Ralph D. Turlington, Commissioner of Education

Produced by:
The Center for Instructional Development and Services
(Formerly The Center for Studies in Vocational Education)
Florida State University

For further information, contact:
Research Coordinating Unit
Bureau of Program Improvement
Division of Vocational, Adult, and Community Education
Department of Education
Knott Building
Tallahassee, FL 32301-8101

©State of Florida, Department of State, 1986

Authorization for reproduction is hereby granted to the State System of Public Education as defined in 228.041(1), Florida Statutes. No authorization is granted for distribution or reproduction outside the State System of Public Education without prior approval in writing.

The use of trademarks in this document is strictly for the purpose of clarity and in no way should be considered an endorsement by the Department of Education, Florida State University, or The Center for Instructional Development and Services.

Florida: A State of Educational Distinction. On a statewide average, educational achievement in the state of Florida will equal that of the upper quartile of states within five years, as indicated by commonly accepted criteria of attainment.

DVACE/01/86/535

123456789/89876

COMMERCIAL FOODS AND CULINARY ARTS COMPETENCY-BASED SERIES

LEARNING ACTIVITY PACK

5.15a

SECTION 5

Yeast Breads

Basic Food Preparation

State of Florida
Department of Education
Ralph D. Turlington, Commissioner of Education
Tallahassee, Florida
Affirmative action/equal opportunity employer

Division of Vocational, Adult, and Community Education

January 1986

Acknowledgments

The Division of Vocational, Adult, and Community Education, Florida Department of Education wishes to express its gratitude to the agencies listed, which have granted permission for Florida to adapt the following materials:

Quantity Foods, developed by the 916 Vocational-Technical Center, White Bear Lake, Minnesota.

Food Management, Production, and Services: Competency-Based Curriculum, developed for the Tennessee State Department of Education, Division of Vocational Education, Nashville, Tennessee.

Career Related Instruction Series: *Baking and Pastry; Food Preparation; Food Service,* developed at the Capital Area Career Center, Mason, Michigan.

Also used were:

Employability Skills Series: *Good Work!* and *Food Production and Services: Learning Manager's Guide,* developed by the Florida Division of Vocational, Adult, and Community Education.

Subject matter experts who reviewed materials from around the nation, selected the materials to be adapted, and used their considerable experience and talents to monitor the development process were:

William Jacoby, St. Augustine Technical Center

Richard Petrello, Withlacoochee Area Vocational-Technical Center

William Petsch, Pinellas Vocational-Technical Institute

Nancy Steryous, St. Petersburg Vocational-Technical Institute

Bill White, Northeast Senior High School, St. Petersburg

John Wright, Westside Vocational Skills Center, Jacksonville

Ronald Zabkiewicz, South Technical Education Center, Boynton Beach

Assistance on the project was also given by:

Valeria Mason and Iris Helveston, Regional Program Consultants, Division of Vocational, Adult, and Community Education

The following individuals at The Center for Instructional Development and Services, Florida State University, adapted the materials:

Romeo Massey, Project Manager

Catherine P. Fulford, Shahrokh Massoudi, Hilary L. Morris, and Margaret Van Every, Instructional Designers

Margaret Barlow, Frances Brock, Ellen Wells, and Charles Silverman, Writer/Editors

John Francis, Visual Designer

Gary Carroll, Deborah Green, and Fred Clark, Illustrators

Purpose and Contents

Purpose

The purpose of LAP 5.15a is to acquaint you with yeast breads and their ingredients, and to teach you how to make this nutritious food, which is a basic part of people's diet the world over.

Contents

Introduction 2

Vocabulary 4

Yeast Breads and Their Ingredients 6
The Six Basic Ingredients 6
Types of Dough 7

Preparing Yeast Bread 11
Equipment for Making Yeast Bread 11
Eleven Steps in Making Yeast Bread 13
Characteristics of High-Quality Yeast Breads 17
Causes of Poor Quality in Yeast Breads 18

Answer Keys for Written Activities 24

Introduction

Written Test

You will be able to pass the written test for LAP 5.15a when you can successfully complete the following:

1. Match vocabulary words with their definitions. (All 6 must be correct.)

2. Match the ingredients of yeast bread with their main functions. (All 6 must be correct.)

3. Match types of dough with their main characteristics. (All 4 must be correct.)

4. Match the names of equipment with illustrated pieces of equipment. (At least 6 out of 8 must be correct.)

5. Complete statements about preparing yeast bread by filling in the blanks with words selected from a word bank. (At least 10 out of 12 must be correct.)

If you feel you know enough to pass the written test for LAP 5.15a before studying it, talk with your instructor.

Skills Test

You will be able to pass the skills test for LAP 5.15a when you complete the following successfully:

Prepare yeast bread. Each loaf must look appetizing and have a regular shape and size and a golden brown, rounded top. The crust mustn't be too thick. The crumb must be even grained, without holes, tender, and slightly moist. All safety precautions and sanitation procedures must be followed.

REMEMBER . . . Your final performance will also be judged on how well you:

- organize your work area for efficient production before starting,

- follow the steps correctly in the right order, and

- clean your work area when you are finished.

If you feel you know enough to pass the skills test for LAP 5.15a before practicing the skills, talk with your instructor.

Learning Steps

To help you pass the written and skills tests for this LAP, you should follow these learning steps in order. There are two kinds of activities you will be asked to do:

Written activities will prepare you for the **written test**. They should all be done on a separate sheet of paper. The answers for these activities are in the back of this LAP. **Do not write in this LAP!**

Introduction (continued)

Practice Checklist activities will prepare you for the **skills test**. They will be done in the kitchen or dining area. Check with your instructor before beginning these activities.

1. View the filmstrip *Yeast Breads and Their Ingredients*, and complete the activity.
2. Read and study **Information Sheet 1**: Vocabulary.
3. Complete **Activity 1**: Matching Vocabulary Words. Check your answers.
4. Read and study **Information Sheet 2**: Yeast Breads and Their Ingredients.
5. Complete **Activity 2A**: Ingredients. Check your answers.
6. Complete **Activity 2B**: Types of Dough. Check your answers.
7. View the filmstrip *Preparing Basic Yeast Bread*, and complete the activity.
8. Read and study **Information Sheet 3**: Preparing Yeast Bread.
9. Complete **Activity 3A**: Equipment. Check your answers.
10. Complete **Activity 3B**: Preparing Yeast Bread. Check your answers.
11. Complete **Activity 3C**: Practice Checklist—Prepare Yeast Bread.
12. Get **Written Test 5.15a** from your instructor and complete it. If you are successful, go on to Step 13; if not, talk with your instructor.
13. Have your instructor evaluate you on **Skills Test 5.15a**. If you are successful, you have completed this LAP; if not, talk with your instructor.

Information Sheet 1
Vocabulary

The following words will be used in this LAP. Study the list. When you think you know all the words, test yourself by doing the practice activity.

1. **kernel**—the whole seed of a grain
2. **proportion**—the relation of one part to another or to the whole with respect to size, amount, or degree
3. **fermentation**—in bread making, a chemical change in the dough caused by a leavening agent; for example, yeast mixed with liquid and sweetener produces carbon dioxide gas, which makes the dough rise
4. **aroma**—a distinctive, pleasant smell
5. **texture**—the way something looks and feels; some words that might describe the texture of bread are *fine, coarse, smooth, granular, soft, hard, light,* and *heavy*
6. **proof**—to let yeast dough rise by setting it in a warm, moist place

Activity 1
Matching Vocabulary Words

Directions

On a separate sheet of paper, write the vocabulary words listed below. Beside each word write the correct definition, chosen from the following list.

Vocabulary Words

1. **kernel** _____
2. **proportion** _____
3. **fermentation** _____
4. **aroma** _____
5. **texture** _____
6. **proof** _____

Definitions

A distinctive, pleasant smell

In bread making, a chemical change in the dough caused by a leavening agent

To let yeast dough rise by setting it in a warm, moist place

The whole seed of a grain

The relation of one part to another or to the whole with respect to size, amount, or degree

The way something looks and feels (coarse, fine, smooth, granular, etc.)

Check your answers in the back of this LAP. If you missed any, review Information Sheet 1.

Information Sheet 2
Yeast Breads and Their Ingredients

There are few things more satisfying in the bakery than making loaves of warm, fragrant yeast bread. Yeast, which gives many breads their unmistakable flavor and aroma, is the active ingredient in the bread dough that causes it to rise.

Yeast breads come in a variety of shapes, sizes, and textures. The four most common types of yeast bread are white, whole wheat, pumpernickel, and rye.

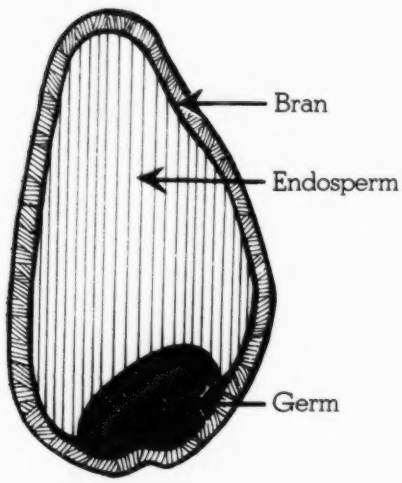
The Six Basic Ingredients

All yeast breads are made with six basic ingredients: flour, yeast, liquid, salt, sweetener, and shortening. These ingredients are combined to form dough, which is then baked into loaves of bread.

Flour

Flour, the main ingredient in yeast breads, gives bread its shape, texture, and body. It is made by grinding grains—such as wheat, rye, barley, and corn—into powder.

Wheat flour is particularly good for making yeast breads because of its high *gluten* content. Gluten is the substance in flour that—when mixed with liquid—makes the dough sticky and elastic. Gluten allows the dough to be stretched and folded, and helps it hold its shape.



Parts of a wheat kernel

The flour in whole wheat bread is made from whole kernels of wheat. The wheat kernel has three parts: the bran, which is the outer covering; the endosperm, which is the starchy inner part; and the germ, which is at the bottom of the kernel and contains oils, minerals, and vitamins. Whole wheat flour is high in vitamins and minerals and gives bread a nutlike flavor.

The white flour in white bread is wheat flour from which most of the bran and all of the germ have been removed. To replace the lost nutrients, vitamins and iron are added after milling. Enriched white flour is almost equal to whole wheat flour in vitamins and minerals.

Bread flours are also made by grinding rye grains. Rye flour has very little gluten, and so in bread making it's usually mixed with wheat flour. The proportion of wheat flour to rye flour affects the color and texture of the bread; more rye flour makes the bread darker and heavier. Coarsely ground rye flour that is not finely sifted is called pumpernickel and is used to make pumpernickel bread.

Yeast

No matter which type of flour is used, it needs the leavening agent yeast to make it rise. Yeast is a microscopic fungus (a tiny, nongreen plant) that grows rapidly when mixed with liquid and sweetener at room temperature. Growing yeast produces carbon dioxide, a gas that causes dough to rise. Yeast comes in two forms: compressed into

Information Sheet 2 (continued)
Yeast Breads and Their Ingredients

a cake and dried into a powder. Bread recipes call for either compressed or dry yeast.

Liquid

The liquid used in yeast bread can be water or milk or both. Liquid dissolves the dry ingredients and helps the yeast to grow. Mixed with the gluten in flour, it helps make the dough elastic. Milk used as the liquid also adds nutrients (vitamins and minerals), makes the bread richer, and helps brown the crust.

Salt

Salt improves the flavor of bread. This ingredient must be carefully measured, since too much of it may stop the yeast from growing.

Sweetener

A sweetener like sugar or honey added to the dough mixture improves the flavor of the baked product, makes the yeast grow faster, and helps the crust of the bread bake to a golden brown.

Shortening

Shortening makes the dough softer and richer and helps keep it fresh. Shortenings commonly used in yeast breads are butter, margarine, and vegetable oil and shortening.

Types of Dough

Four basic types of yeast dough are used to make breads and rolls:

1. **Water (lean) dough** makes crusty bread and crusty water rolls.
2. **Milk (regular) dough** makes richer bread and rolls.
3. **Sweet dough** makes fancy bread, rolls, coffee cakes, and donuts.
4. **Danish dough** makes flaky sweet rolls.

These doughs differ from each other not only in the amount and kind of liquid used, but also in the amount of shortening, sugar, and eggs.

The four types of yeast bread dough and the characteristics of each are listed in the following chart. Also listed are examples of breads prepared from each type of dough.

Information Sheet 2 (continued)
Yeast Breads and Their Ingredients

Yeast Doughs

Type	Characteristics	Examples
Water (lean) dough	Produces a crusty bread Requires less sugar than other doughs Sometimes has no shortening	French bread Vienna rolls Bread sticks Italian bread
Milk (regular) dough	Produces a rich bread Can be shaped into any style: cloverleaf, fan-tan, knots, Parker House (rolls), butterfly (rolls), braided (rolls)	White bread Whole wheat bread Herb bread Egg bread (with more egg and less flour)
Sweet dough	Requires more eggs, sugar, and yeast, but less flour, than other doughs Contains butter or margarine for richness	Rich dinner rolls Baba rums Breakfast breads or rolls Coffee cakes Raised donuts Bismarks Swedish tea rings
Danish dough	Makes a sweeter, flakier product Contains a higher proportion of shortening than other doughs	Danish rolls (in assorted shapes, styles, and flavors)

Activity 2A
Ingredients

Directions

On a separate sheet of paper, write the names of the six basic ingredients of yeast bread, as listed below. Then write the major function(s) of each, chosen from the following list.

Ingredients

Liquid _____

Salt _____

Shortening _____

Sweetener _____

Flour _____

Yeast _____

Functions

Makes the dough soft and rich

Speeds the growth of the yeast; improves the flavor of the bread

Makes the dough rise

Gives bread shape, texture, and body

Improves the flavor of bread

Helps make the dough elastic (when mixed with flour); helps the yeast to grow; dissolves the dry ingredients

Check your answers in the back of this LAP. If you missed any, review Information Sheet 2.

Activity 2B
Types of Dough

Directions

On a separate sheet of paper, write out the four types of dough, as listed below. Then from the following list, choose the main characteristic of each type of dough, and write it next to the dough type.

Types of Dough

Water (lean)_____

Milk (regular) _____

Sweet_____

Danish _____

Characteristics

Requires more eggs, sugar, and yeast than other doughs

Makes a sweeter, flakier product

Produces a rich bread

Produces a crusty bread

Check your answers in the back of this LAP. If you missed any, review Information Sheet 2.

Information Sheet 3
Preparing Yeast Bread

Yeast breads and rolls are made from white, whole grain (usually wheat or rye), or mixed flours. Each type of flour gives the bread a different flavor, aroma, and texture.

Basic bread contains flour, salt, sweetener, shortening, water, and yeast. Sweet yeast doughs have more sweetener than do bread and roll doughs. They also contain butter or margarine and eggs for richness and flavor.

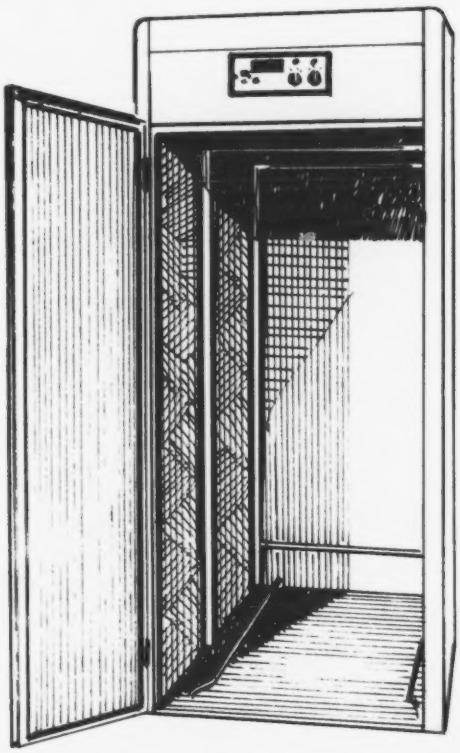
Yeast doughs usually should rise until they're double in bulk (size). Sweet doughs and doughs made from whole-grain flour rise more slowly. If dough isn't allowed to rise enough, the bread will be too heavy. If it's allowed to rise too much, the bread will have a rough, uneven texture; it may even collapse while baking.

Equipment for Making Yeast Bread

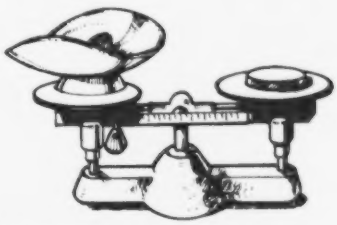
Before discussing the procedure for making yeast bread, let's quickly look at the kinds of **equipment** required for the task.

The large pieces of equipment you'll need are a baker's scale, a baker's worktable, a mixing machine, a proofing cabinet, and an oven. See the illustrations that follow. (General information about baking equipment is given in LAPs 4.1, *Introduction to Commercial Cooking Equipment*; 4.2, *Proper Use and Care of Miscellaneous Equipment*; and 4.4, *Recognition and Use of Kitchen Tools and Equipment*.) A proofing cabinet is a temperature- and humidity-controlled cabinet where dough is placed and allowed to rise before it's baked. (If a proofing cabinet isn't available, you can put the pan of dough in a warm, moist place away from drafts.)

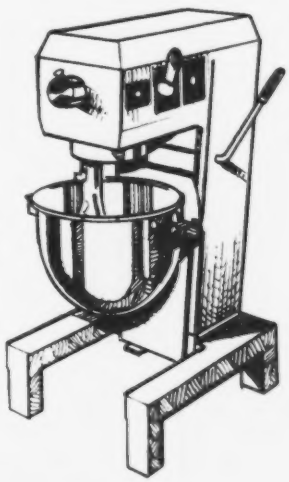
Information Sheet 3 (continued)
Preparing Yeast Bread



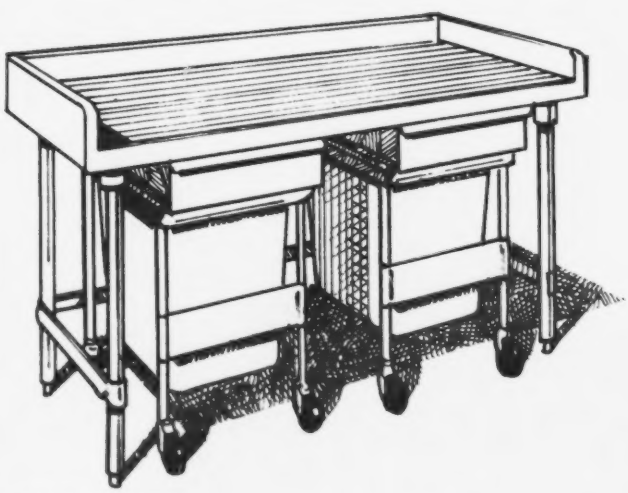
Proofing cabinet



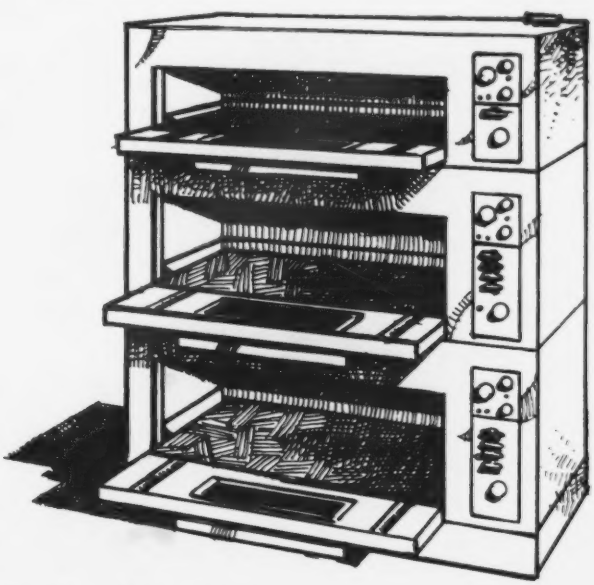
Baker's scale



Mixing machine



Baker's worktable



Electric combination oven

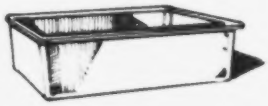
Information Sheet 3 (continued)
Preparing Yeast Bread

The smaller tools and utensils you'll need for preparing yeast bread are measures, a dough cutter, a plastic scraper, loaf pans, wire racks for cooling, a lightly greased container in which the dough will rise, and a rolling pin. Most of these are illustrated below. You'll also need a large cloth to cover the dough.

Measure

Dough cutter

Plastic scraper



Loaf pan

Rolling pin

Eleven Steps in Making Yeast Bread

The eleven steps outlined as follows provide a general procedure for making loaves of yeast bread. To make the highest-quality product, be sure to use only the best ingredients and to follow the steps carefully.

Step 1: Mix the Dough

Weigh and measure the ingredients called for in the recipe, using the baker's scale. **Note**: In humid weather more flour may be needed than the recipe calls for.

Mix the yeast and liquid in the mixing bowl at medium speed, long enough to dissolve the yeast (about five minutes). **Note**: The liquid used should be at room temperature. Yeast will not grow where it's too cold, and very high temperatures will kill the yeast.

Add the flour, sugar, salt, and shortening to the dissolved yeast, and mix at medium speed until the mixture becomes a smooth dough (about seven or eight minutes). If you sprinkle a little flour around the mixing bowl just before you turn off the mixer, the dough won't stick to the bowl.

Step 2: Knead the Dough

Lightly flour the worktable to prevent the dough from sticking as you knead it. Remove the dough from the mixing bowl and place it on the worktable. **Note**: Kneading the dough forces out the air and helps the gluten develop so that the bread will rise the way it should.

Information Sheet 3 (continued)
Preparing Yeast Bread

To knead the dough:
(1) Gently fold the dough in half toward you.

(2) Push down on the dough with the heels of both hands.

(3) Give the dough a quarter turn.

(4) Continue kneading for the time specified in the recipe. **Note**: Dough can also be kneaded with a dough hook.

Step 3: Let the Dough Rise

Oil a large mixing bowl and place the ball of dough in it. Cover the dough lightly with oil by gently rubbing the dough against the sides of the oiled bowl. Then turn the ball over so that the oiled side faces up. The oil keeps the dough from drying out. (If the dough becomes dry, it forms a crust, which should be removed. If it isn't removed, this crust will cause streaks throughout the bread.)

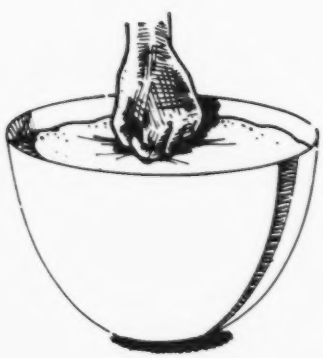
Place a piece of plastic wrap or foil on top of the mixing bowl, or cover the bowl with a clean, dry towel. Place the dough in a warm area. If the area is cooler than 75° F, fill a large bowl halfway with hot water. Place a wire rack on top of the bowl, and set the bowl of dough on the rack above the hot water. Keep the water hot.

Information Sheet 3 (continued)
Preparing Yeast Bread

Let the dough rise until it is double in bulk (size). This usually takes about 1½ hours. Remember, if the dough isn't allowed to rise enough, the bread will be too heavy. If it's allowed to rise too much, the bread will have a rough, uneven texture; it might even collapse while baking. **Note**: During this *fermentation* time, the yeast grows and gives off the leavening gas carbon dioxide.

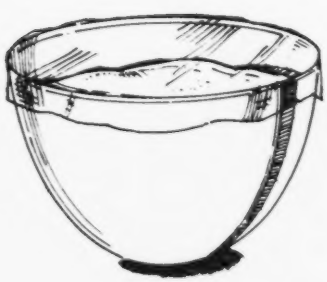
You can tell whether the dough has risen enough by gently pressing two fingers into the surface of the dough. If the dent you make remains, the dough is ready to shape. If the dent springs back, the dough should rise a little longer.

Step 4: Punch Down the Dough



After the dough has doubled in bulk, it must be punched back down to force out excess gas. To punch down the dough, push your fist into the center of the dough as far as you can. Pull the dough away from the sides of the bowl, and then press the dough down toward the center again to form a ball. Put the dough back on the worktable, knead it for a short time, and then fold the dough over again into one lump.

Step 5: Let the Dough Rise



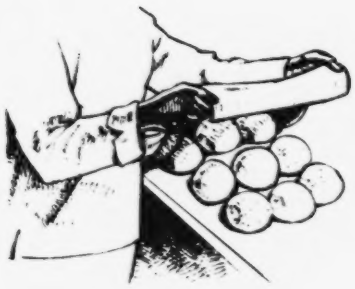
Cover the dough and let it rise again for about 45 minutes. This time the dough will not double in size, but it should increase in size by about three-fourths.

The dough is now ready to be divided into portions that will be shaped into loaves.

Information Sheet 3 (continued)
Preparing Yeast Bread

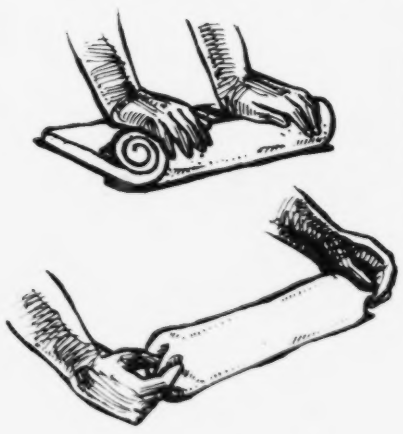
Step 6: Divide the Dough

Using a dough cutter, cut the dough into pieces, one piece for each loaf. Weigh each cut piece of dough on the baker's scale, adding and subtracting dough until all pieces weigh the same. (The desired weight will be given in the recipe.)



Step 7: Roll the Dough

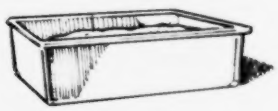
Roll each cut piece of dough into a ball. Cover the balls of dough with a cloth, and let them stand for about 15 minutes. (During this time, you should grease the loaf pans for proofing, Step 9.) Then, once again remove excess gas by rolling out the dough balls into rectangles with a rolling pin. Be sure to roll out all the bubbles at the edges.

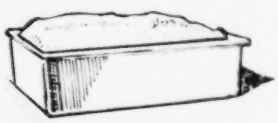


Step 8: Shape the Dough

Shape each flattened piece of dough into a compact loaf by rolling it up toward you with your hands. Roll it *tightly* to make sure no gas is trapped in it. Pinch the seam (where the roll comes together) to seal it. Turn the roll so that the seam side is on the bottom. Seal the ends by pinching and flattening them and folding them into the roll. Fit each loaf into a greased pan, with the seam side down. The dough is now ready for proofing.

Information Sheet 3 (continued)
Preparing Yeast Bread





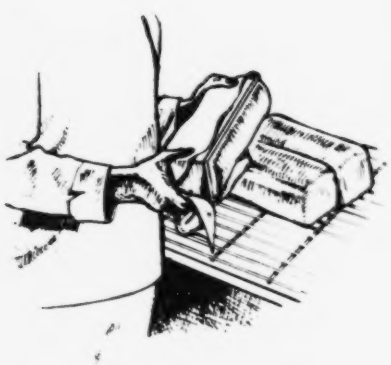
Step 9: Proof the Dough

Proofing is the final rising of the dough before baking. It requires a higher temperature and more moisture in the air than were needed in earlier fermentation periods.

Place the loaf pans in the proofing cabinet. (A proofing cabinet is illustrated at the beginning of this information sheet.) Each loaf will rise to twice its bulk in 15 to 45 minutes.

Step 10: Bake the Dough

Preheat the oven to 400° F. Place the pans in the oven and bake the dough for 30 to 40 minutes. When the bread is done, it will have a smooth, rounded, golden brown top.



Step 11: Cool the Loaves

Right after you take the hot loaves out of the oven, remove them from their pans and place them on wire racks to cool. **Do not leave the bread loaves in the pans**—they'll become soggy. If you don't serve the loaves of yeast bread soon after cooling, wrap and store them in a cool, dry place to preserve their freshness.

Characteristics of High-Quality Yeast Breads

When yeast bread has been prepared correctly, it has the following characteristics:

- Evenly browned, but not too dark
- Smooth, rounded, golden brown top
- Crust not too thick
- Regular shape and size, not too small or too large
- No cracks or blisters
- Even grained inside, with no streaks
- Tender, light crumb

Information Sheet 3 (continued)
Preparing Yeast Bread

Causes of Poor Quality in Yeast Breads

Outside	Possible Causes
Tough	Not enough shortening; not enough rising time; overbaking
Too thick	Crusting (drying out) of the dough during rising; oven temperature too low; overbaking
Cracks	Crusting of the dough during rising; cooling of the loaf too quickly
Blisters (raised spots)	Improper shaping of the loaf; temperature too low during rising; rising time too long
Irregular shape	Improper shaping of the loaf; too much dough for the pan; not enough rising time
Too small	Too much salt; not enough yeast; rising time too short; oven temperature too high
Too large	Not enough salt; too much yeast; rising time too long; oven temperature too low
Too pale	Not enough sugar; temperature of the dough too high during mixing and rising; oven temperature too low
Uneven color	Improper shaping of the loaf; incorrect placement in the oven; uneven heat in the oven
Too dark	Too much sugar; not enough rising time; oven temperature too high

Information Sheet 3 (continued)
Preparing Yeast Bread

Causes of Poor Quality in Yeast Breads (continued)

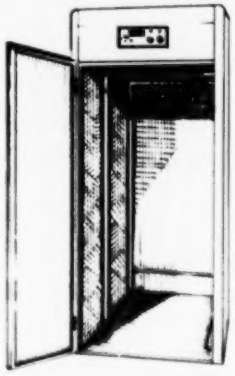
Inside	**Possible Causes**
Poor color	Too much yeast; temperature of the dough too high during mixing and rising; rising time too long; oven temperature too low
Streaks	Improper mixing of the dough; use of too much flour during kneading and shaping
Coarse texture	Dough too soft; temperature of dough too high during mixing and rising; rising time too long
Uneven grain	Dough too soft; use of too much flour during kneading and shaping; improper punching and shaping
Hard crumb	Too much flour; use of substitutes for wheat flour; temperature of the dough too high during mixing and rising; rising time too long; overkneading

Activity 3A
Equipment

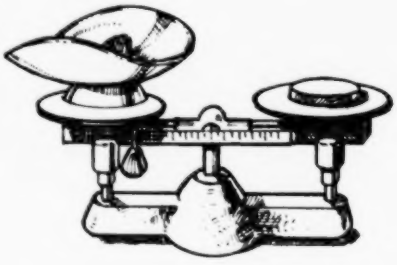
Directions

Look at the eight illustrations that follow. **On a separate sheet of paper**, write the numerals 1 through 8. From the word bank below, select the correct name for each piece of equipment illustrated, and write it next to the appropriate numeral.

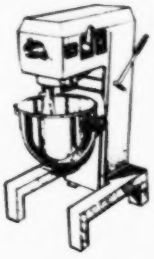
DO NOT WRITE IN THIS LAP



1. _____



2. _____



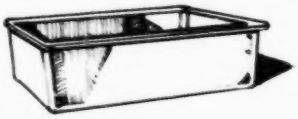
3. _____

4. _____

5. _____

6. _____

7. _____



8. _____

Word Bank

slicing machine
baker's scale
loaf pan
flour sifter
portion scale
plastic scraper
muffin pan
dough cutter
mixing machine
pastry brush
wire whip
measure
rolling pin

Check your answers in the back of this LAP. If you missed any, review Information Sheet 3.

Activity 3B
Preparing Yeast Bread

Directions

Read the statements below. **On a separate sheet of paper**, write out the statements and fill in the blanks with the correct words, selected from the word bank that follows.

1. The first step in preparing yeast bread is to _____ the ingredients to form the _____.
2. To knead the dough, gently _____ it toward you and then push down.
3. To prevent dough from sticking to the mixing bowl, sprinkle a little _____ around the bowl.
4. During _____, yeast grows and gives off carbon dioxide.
5. If dough is not allowed to rise enough, the bread will be too _____.
6. If dough is allowed to rise too much, the bread will have a _____ texture.
7. Punching is a way to remove _____.
8. _____ requires a higher temperature and more moisture in the air than did earlier fermentation periods.
9. If bread loaves are left in the pans after baking, they'll become _____.
10. Properly baked yeast breads have no _____ or _____.

Word Bank

proofing
light
tender
dough
punch
blisters
fold
soggy
liquid
mix
rough
cracks
fermentation
gas
shortening
heavy
roll
flour

Check your answers in the back of this LAP. If you missed any, review Information Sheet 3.

Activity 3C

Practice Checklist: Prepare Yeast Bread

Directions

Write down the steps and the standards for evaluation for this task **on a separate sheet of paper**. Then, ask your instructor for the tools, equipment, and ingredients you will need to practice this skill. FOLLOW THE STEPS CAREFULLY. You may want to look at the information in the LAP for help in performing the task.

Steps

✓	
	1. Get a recipe for yeast bread from your instructor. Read the recipe and make any necessary adjustments.
	2. Wash your hands.
	3. Organize your work area by assembling all ingredients and utensils near the worktable.
	4. Mix the ingredients to make the dough, following the recipe carefully. **Caution**: When using the mixing machine and dough hook, be sure to follow standard safety precautions (see LAP 4.2, *Proper Use and Care of Miscellaneous Equipment*).
	5. Remove the dough from the bowl, and place it on the lightly floured worktable.
	6. Knead the dough.
	7. Allow the dough to rise until it has doubled in bulk (about 1½ hours).
	8. Punch down the dough.
	9. Cover the dough and let it rise again. It should increase in size by about three-fourths.
	10. Divide the dough evenly, one piece for each loaf.
	11. Roll each piece of dough into a ball. Cover the dough balls, and let them stand for about 15 minutes.
	12. Remove excess gas by flattening out the dough balls with a rolling pin.
	13. Shape the flattened pieces into loaves, and fit each loaf into a greased loaf pan.
	14. Place the loaf pans in the proofing cabinet, and let each loaf rise to twice its bulk (15–45 minutes).
	15. Preheat the oven to 400°F. Place the loaves in the oven, and bake them for 30 to 40 minutes or until golden brown.
	16. When the loaves are done, remove them from their pans and place them on wire racks to cool.
	17. Clean and sanitize the work area, tools, utensils, and equipment.

Activity 3C (continued)
Practice Checklist: Prepare Yeast Bread

Standards for Evaluation

	✓
1. Were the recipe and preparation procedures followed correctly?	
2. Does each loaf look appetizing?	
3. Does each loaf have a regular shape and size, not too small or too large?	
4. Does each loaf have a golden brown, rounded top?	
5. Is the crust not too thick?	
6. Is the crumb even grained, without holes, tender, and slightly moist?	
7. Were all safety precautions followed?	
8. Were all sanitation procedures followed?	

Answer Keys for Written Activities

Activity 1:
Matching Vocabulary Words

1. **kernel**—the whole seed of a grain
2. **proportion**—the relation of one part to another or to the whole with respect to size, amount, or degree
3. **fermentation**—in bread making, a chemical change in the dough caused by a leavening agent
4. **aroma**—a distinctive, pleasant smell
5. **texture**—the way something looks and feels (coarse, fine, smooth, granular, etc.)
6. **proof**—to let yeast dough rise by setting it in a warm, moist place

Activity 2A:
Ingredients

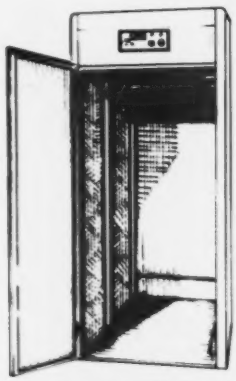
Liquid:	**Helps make the dough elastic (when mixed with flour); helps the yeast to grow; dissolves the dry ingredients**
Salt:	**Improves the flavor of bread**
Shortening:	**Makes the dough soft and rich**
Sweetener:	**Speeds the growth of the yeast; improves the flavor of the bread**
Flour:	**Gives bread shape, texture, and body**
Yeast:	**Makes the dough rise**

Activity 2B:
Types of Dough

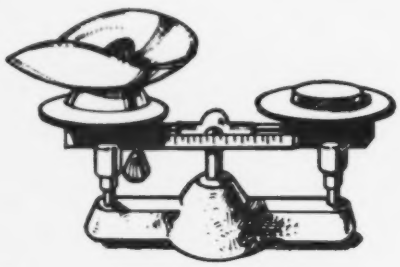
Water (lean)	**Produces a crusty bread**
Milk (regular):	**Produces a rich bread**
Sweet:	**Requires more eggs, sugar, and yeast than other doughs**
Danish:	**Makes a sweeter, flakier product**

Answer Keys for Written Activities (continued)

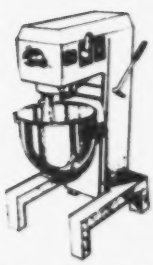
Activity 3A:
Equipment



1. **proofing cabinet**



2. **baker's scale**

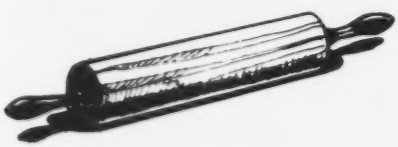


3. **mixing machine**

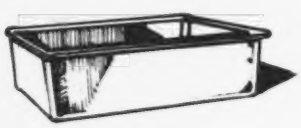
4. **dough cutter**

5. **plastic scraper**

6. **measure**



7. **rolling pin**



8. **loaf pan**

Activity 3B:
Preparing Yeast Bread

1. The first step in preparing yeast bread is to **mix** the ingredients to form the **dough**.
2. To knead the dough, gently **fold** it toward you and then push down.
3. To prevent dough from sticking to the mixing bowl, sprinkle a little **flour** around the bowl.
4. During **fermentation**, yeast grows and gives off carbon dioxide.
5. If dough is not allowed to rise enough, the bread will be too **heavy**.

Answer Keys for Written Activities (continued)

6. If dough is allowed to rise too much, the bread will have a **rough** texture.

7. Punching is a way to remove **gas**.

8. **Proofing** requires a higher temperature and more moisture in the air than did earlier fermentation periods.

9. If bread loaves are left in the pans after baking, they'll become **soggy**.

10. Properly baked yeast breads have no **cracks** or **blisters**.

State of Florida
Department of Education
Ralph D. Turlington, Commissioner of Education
Tallahassee, Florida
Affirmative action/equal opportunity employer

Division of Vocational, Adult, and Community Education

This public document was promulgated at a cost of $1,225.01, or $2.289 per copy, to provide Florida students and educators with competency-based commercial foods and culinary arts instructional materials.

IE 351 BK 86

INSTRUCTOR'S GUIDE
LAP
5.15a

Yeast Breads

Basic Food Preparation

Sponsored and published by:
Florida Department of Education
Ralph D. Turlington, Commissioner of Education

Produced by:
The Center for Instructional Development and Services
(Formerly The Center for Studies in Vocational Education)
Florida State University

For further information, contact:
Research Coordinating Unit
Bureau of Program Improvement
Division of Vocational, Adult, and Community Education
Department of Education
Knott Building
Tallahassee, FL 32301-8101

©State of Florida, Department of State, 1986

Authorization for reproduction is hereby granted to the State System of Public Education as defined in 228.041(1), Florida Statutes. No authorization is granted for distribution or reproduction outside the State System of Public Education without prior approval in writing.

The use of trademarks in this document is strictly for the purpose of clarity and in no way should be considered an endorsement by the Department of Education, Florida State University, or The Center for Instructional Development and Services.

Florida: A State of Educational Distinction. On a statewide average, educational achievement in the state of Florida will equal that of the upper quartile of states within five years, as indicated by commonly accepted criteria of attainment.

DVACE/01/86/155

123456789/89876

COMMERCIAL FOODS AND CULINARY ARTS COMPETENCY-BASED SERIES

INSTRUCTOR'S GUIDE
LAP
5.15a

Yeast Breads

Basic Food Preparation

State of Florida
Department of Education
Ralph D. Turlington, Commissioner of Education
Tallahassee, Florida
Affirmative action/equal opportunity employer

Division of Vocational, Adult, and Community Education

January 1986

Acknowledgments

The Division of Vocational, Adult, and Community Education, Florida Department of Education wishes to express its gratitude to the agencies listed, which have granted permission for Florida to adapt the following materials:

Quantity Foods, developed by the 916 Vocational-Technical Center, White Bear Lake, Minnesota.

Food Management, Production, and Services: Competency-Based Curriculum, developed for the Tennessee State Department of Education, Division of Vocational Education, Nashville, Tennessee.

Career Related Instruction Series: *Baking and Pastry; Food Preparation; Food Service*, developed at the Capital Area Career Center, Mason, Michigan.

Also used were:

Employability Skills Series: *Good Work!* and *Food Production and Services: Learning Manager's Guide*, developed by the Florida Division of Vocational, Adult, and Community Education.

Subject matter experts who reviewed materials from around the nation, selected the materials to be adapted, and used their considerable experience and talents to monitor the development process were:

William Jacoby, St. Augustine Technical Center

Richard Petrello, Withlacoochee Area Vocational-Technical Center

William Petsch, Pinellas Vocational-Technical Institute

Nancy Steryous, St. Petersburg Vocational-Technical Institute

Bill White, Northeast Senior High School, St. Petersburg

John Wright, Westside Vocational Skills Center, Jacksonville

Ronald Zabkiewicz, South Technical Education Center, Boynton Beach

Assistance on the project was also given by:

Valeria Mason and Iris Helveston, Regional Program Consultants, Division of Vocational, Adult, and Community Education

The following individuals at The Center for Instructional Development and Services, Florida State University, adapted the materials:

Romeo Massey, Project Manager

Catherine P. Fulford, Shahrokh Massoudi, Hilary L. Morris, and Margaret Van Every, Instructional Designers

Margaret Barlow, Frances Brock, Ellen Wells, and Charles Silverman, Writer/Editors

John Francis, Visual Designer

Gary Carroll, Deborah Green, and Fred Clark, Illustrators

Contents

Contents of Instructor's Guide 5.15a

Instructional Matrix 2

Notes to the Instructor 3

Suggested Instructional Procedures 4

Written Test 6

Answer Key for Written Test 11

Skills Test 12

Contents of LAP 5.15a

Introduction 2

Vocabulary 4

Yeast Breads and Their Ingredients 6
The Six Basic Ingredients 6
Types of Dough 7

Preparing Yeast Bread 11
Equipment for Making Yeast Bread 11
Eleven Steps in Making Yeast Bread 13
Characteristics of High-Quality Yeast Breads 17
Causes of Poor Quality in Yeast Breads 18

Answer Keys for Written Activities 24

Instructional Matrix

Directions If you want to use only part of the materials in this LAP, use this matrix to help you select what you need.

Objectives	Instructional Materials	Practice and Feedback	Evaluation
Knowledge Objectives	**Information Sheets**	**Written Activities**	**Written Test Items**
1. Match vocabulary words with their definitions. (All 6 must be correct.)	1: Vocabulary	1: Matching Vocabulary Words	Part I: 1-6
2. Match the ingredients of yeast bread with their main functions. (All 6 must be correct.)	2: Yeast Breads and Their Ingredients	2A: Ingredients	Part II: 1-6
3. Match types of dough with their main characteristics. (All 4 must be correct.)	2: Yeast Breads and Their Ingredients	2B: Types of Dough	Part III: 1-4
4. Match the names of equipment with illustrated pieces of equipment. (At least 6 out of 8 must be correct.)	3: Preparing Yeast Bread	3A: Equipment	Part IV: 1-8
5. Choose statements about preparing yeast bread by filling in the blanks with words selected from a word bank. (At least 10 out of 12 must be correct.)	3: Preparing Yeast Bread	3B: Preparing Yeast Bread	Part V: 1-12
Skill Objectives	**Information Sheets**	**Practice Checklists**	**Skills Test Items**
Prepare yeast bread. Each loaf must look appetizing and have a regular shape and size and a golden brown, rounded top. The crust mustn't be too thick. The crumb must be even grained, without holes, tender, and slightly moist. All safety precautions and sanitation procedures must be followed.	3: Preparing Yeast Bread	3C: Prepare Yeast Bread	1-5

Notes to the Instructor

General Notes

- This is the first of two LAPs about breads.
- Students should complete this LAP before beginning LAP 5.15b.
- The filmstrips *Yeast Breads and Their Ingredients* and *Preparing Basic Yeast Bread* can be used with regular and special-needs students for reinforcement of the instruction in this LAP. (These filmstrips are from the series *Food Production and Services Filmstrips*, Part 3; Tallahassee, Fla.: Florida Department of Education, Division of Vocational, Adult, and Community Education; to be released in 1985 [hereafter referred to as *FPS Filmstrips*, Part 3].)
- For additional information about equipment and safety, see LAP 4.2.

OPPS/V-TECS

There are no Florida **OPPS** (Occupational Proficiency Performance Standards) or Florida/**V-TECS** (Vocational-Technical Education Consortium of States) areas covered by or related to the materials in LAP 5.15a.

Career MAP

The materials in LAP 5.15a cover or are related to the following Commercial Foods and Culinary Arts Career MAP (Career *M*erit *A*chievement *P*lan) competency:

Prepare and bake yeast dough.

Special Needs

The following materials can be used for students who are educable mentally retarded/handicapped (EMR/EMH) or academically disadvantaged as an alternative to, or in addition to, this LAP:

Series: Career Related Instruction (CRI)
Occupational Cluster: Food Preparation and Service
Title: *The Six Basic Ingredients of Yeast Bread* (FPS BPOL 001)

Suggested Instructional Procedures

Individual Instruction

If you choose to use this LAP as a self-paced, self-instructional unit, have the student(s) follow the learning steps in the LAP, as listed below.

Learning Steps in LAP 5.15a

1. View the filmstrip *Yeast Breads and Their Ingredients (FPS Filmstrips*, Part 3), and complete the activity.
2. Read and study **Information Sheet 1**: Vocabulary.
3. Complete **Activity 1**: Matching Vocabulary Words. Check your answers.
4. Read and study **Information Sheet 2**: Yeast Breads and Their Ingredients.
5. Complete **Activity 2A**: Ingredients. Check your answers.
6. Complete **Activity 2B**: Types of Dough. Check your answers.
7. View the filmstrip *Preparing Basic Yeast Bread (FPS Filmstrips*, Part 3), and complete the activity.
8. Read and study **Information Sheet 3**: Preparing Yeast Bread.
9. Complete **Activity 3A**: Equipment. Check your answers.
10. Complete **Activity 3B**: Preparing Yeast Bread. Check your answers.
11. Complete **Activity 3C**: Practice Checklist—Prepare Yeast Bread.
12. Get **Written Test 5.15a** from your instructor and complete it. If you are successful, go on to Step 13; if not, talk with your instructor.
13. Have your instructor evaluate you on **Skills Test 5.15a**. If you are successful, you have completed this LAP; if not, talk with your instructor.

Group Instruction

If you choose to use this LAP as a unit of instruction for more than one student, the following teaching steps are suggested.

Teaching Steps for LAP 5.15a

1. Introduce the subject of preparing yeast bread, and show the filmstrips *Yeast Breads and Their Ingredients* and *Preparing Basic Yeast Bread* (both *FPS Filmstrips*, Part 3).
2. Discuss the objectives in LAP 5.15a.

Suggested Instructional Procedures (continued)

3. Discuss the vocabulary words with the group.
4. Have each student read the information sheets and do the written activities in the LAP.
5. As a group, discuss the basic ingredients of yeast bread. Show the students examples, using quantities normally required in a recipe.
6. Demonstrate preparing yeast bread by using the practice checklist in Activity 3C or one of your own choosing. Have the students practice, with your assistance.
7. Give the students **Written Test 5.15a** to complete. Evaluate the results, using the Answer Key in this Instructor's Guide. Make special arrangements for those who do not master this unit.
8. Use **Skills Test 5.15a** to evaluate each student. Assign students who do not master the skills satisfactorily to practice more in the kitchen, with some assistance.
9. Use the additional instructional activities/enrichment with the group or with individual students.

Additional Instructional Activities/Enrichment

Suggested Readings

Haines, Robert G. *Food Preparation for Hotels, Restaurants, and Cafeterias*. 2nd ed. Alsip, Ill.: American Technical Publishers, 1973.

Written Test 5.15a

I. Matching Vocabulary Words

Directions

Match each vocabulary word below with its correct definition. Write the letter of the definition, chosen from the list that follows, in the blank beside each word.

Vocabulary Words

_____ 1. **kernel**

_____ 2. **proportion**

_____ 3. **fermentation**

_____ 4. **aroma**

_____ 5. **texture**

_____ 6. **proof**

Definitions

a. the way something looks and feels (fine, coarse, smooth, granular, etc.)

b. a distinctive, pleasant smell

c. the whole seed of a grain

d. in bread making, a chemical change in the dough caused by a leavening agent

e. the relation of one part to another or to the whole with respect to size, amount, or degree

f. to let yeast dough rise by setting it in a warm, moist place

Written Test 5.15a (continued)
II. Ingredients

Directions

Match yeast-bread ingredients with their major functions. Write the letter of the correct function(s), chosen from the list that follows, in the blank beside the ingredient.

Ingredients

_____ 1. **liquid**

_____ 2. **salt**

_____ 3. **shortening**

_____ 4. **sweetener**

_____ 5. **flour**

_____ 6. **yeast**

Functions

a. makes the dough rise

b. helps make the dough elastic (when mixed with flour); helps the yeast to grow; dissolves the dry ingredients

c. gives bread shape, texture, and body

d. improves the flavor of bread

e. makes the dough soft and rich

f. speeds the growth of the yeast; improves the flavor of bread

Written Test 5.15a (continued)
III. Types of Dough

Directions

Match each type of dough with its main characteristic. Write the letter of the characteristic, chosen from the list that follows, in the blank beside the type of dough.

Types of Dough

_____ 1. **water (lean)**

_____ 2. **milk (regular)**

_____ 3. **sweet**

_____ 4. **Danish**

Characteristics

a. produces a rich bread

b. makes a flakier product

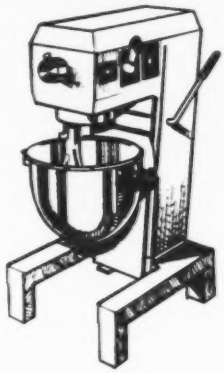
c. produces a crusty bread

d. requires more eggs, sugar, and yeast than other doughs

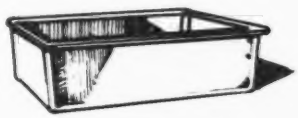
Written Test 5.15a (continued)
IV. Equipment

Directions

From the word bank below, choose the correct name for each piece of equipment illustrated. Write your answers in the spaces provided.



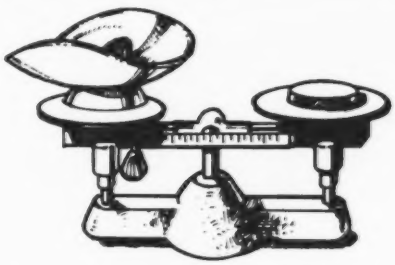
1. _____



2. _____

3. _____

4. _____



5. _____

6. _____

7. _____

8. _____

Word Bank

slicing machine
baker's scale
loaf pan
pastry brush
rolling pin
flour sifter
portion scale
plastic scraper
wire whip
dough cutter
muffin pan
mixing machine
measure

Written Test 5.15a (continued)
V. Preparing Yeast Bread

Directions

Read the statements below. Fill in the blanks with the correct words selected from the word bank that follows.

The first step in preparing yeast bread is to (1)_____ the ingredients to form the (2)_____.

To knead the dough, gently (3)_____ it toward you and then push down.

To prevent dough from sticking to the mixing bowl, sprinkle a little (4)_____ around the bowl.

During (5)_____, yeast grows and gives off carbon dioxide.

If dough is not allowed to rise enough, the bread will be too (6)_____.

If dough is allowed to rise too much, the bread will have a (7)_____ texture.

Punching is a way to remove (8)_____.

(9)_____ requires a higher temperature and more moisture in the air than did earlier fermentation periods.

If bread loaves are left in the pans after baking, they'll become (10)_____.

Properly baked yeast breads have no (11)_____ or (12)_____.

Word Bank

proofing	blisters
mix	shortening
light	fold
rough	heavy
tender	soggy
cracks	roll
dough	flour
fermentation	liquid
punch	gas

Answer Key for Written Test

Each section in the Written Test covers one objective and, therefore, should be evaluated separately. Criteria for evaluating each section are suggested below.

I. To master this objective, the student should answer all of these correctly.

1. c
2. e
3. d
4. b
5. a
6. f

II. To master this objective, the student should answer all of these correctly.

1. b
2. d
3. e
4. f
5. c
6. a

III. To master this objective, the student should answer all of these correctly.

1. c
2. a
3. d
4. b

IV. To master this objective, the student should answer 6 out of 8 correctly.

1. mixing machine
2. loaf pan
3. rolling pin
4. proofing cabinet
5. baker's scale
6. dough cutter
7. measure
8. plastic scraper

V. To master this objective, the student should answer 10 out of 12 correctly.

1. mix
2. dough
3. fold
4. flour
5. fermentation
6. heavy
7. rough
8. gas
9. proofing
10. soggy
11. cracks
12. blisters

Skills Test 5.15a
Preparing Yeast Breads

Student's Name _____ Date _____

The Student Can:	Yes	No
Prepare yeast bread.		
1. Organized work area and ingredients for efficient preparation before beginning.	___	___
2. Followed recipe correctly.	___	___
3. Followed preparation procedures correctly.	___	___
4. Followed all safety precautions.	___	___
5. Followed all sanitation procedures.	___	___
6. Produced an acceptable product. Criteria: Does each loaf look appetizing? Does it have a regular shape and size, not too small or too large? Does it have a golden brown, rounded top? Is the crust not too thick? Is the crumb even grained, without holes, tender, and slightly moist?	___	___
7. Cleaned work area, equipment, tools, and utensils.	___	___

State of Florida
Department of Education
Ralph D. Turlington, Commissioner of Education
Tallahassee, Florida
Affirmative action/equal opportunity employer

Division of Vocational, Adult, and Community Education

IE 350 BK 86